Thalamotomy for Alleviation of Intractable Pain

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Abstract

Seventeen patients had thalamotomies for alleviation of pain due to malignancy since January, 1970. In 12 of them, thalamic electrodes were implanted through occipital burr-holes for subsequent radiofrequency thalamotomies. In 4 cases, the lesions were made by the bifrontal approach, and one case was approached from the left occipital and right frontal. The target in 14 cases was the vicinity of the centromedianum; in 3 cases the target was the zona incerta or the nucleus ventralis posterior lateralis. The size of the lesions was 2 × 6 mm in 10 cases, 8.5 × 11.5 mm in 6 cases, and 7 × 10 mm in one case. Three of the 17 cases required no analgesia between thalamotomy and death. In these cases, thalamic lesions were made in the vicinity of the ventrocaudalis parvo-cellularis and centromedianum. Six cases required non-narcotic analgesics; the lesions were located in the vicinity of the centromedianum in all cases. The remaining 8 patients required narcotics. The lesions of all except one were made outside of centromedianum.